SP 2 CONTRACT TYPE

In accordance with Title 27 DCMR, Chapter 24, the contract type shall be requirements contract.

In accordance with Code of Maryland Regulations (COMAR) Title 21, the contract type issued by Maryland will be a construction contract with the source selection procedures for a Cooperative Purchase Agreement.

The District agrees that it will purchase its requirements of the articles or services included herein from the Contractor. The estimate quantities stated herein reflect the best estimates available. The estimate shall not be construed as a representation that the estimated quantity will be required or ordered, or that conditions affecting requirements will be stable. They shall not be construed to limit the quantities which may be ordered from the Contractor by the District and State of Maryland or to relieve the Contractor of his/her obligation to fill all such orders.

Delivery or performance shall be made only as authorized in accordance with the Ordering clause. There is no limit on the number of orders that may be issued. The District may issue orders requiring delivery to multiple destinations or performance at multiple locations. If the District and/or State of Maryland urgently requires delivery before the earliest date that delivery may be specified under this contract, and if the Contractor will not accept an order providing for the accelerated delivery, the District and/or State of Maryland may acquire the urgently required goods or services from another source.

There is a maximum limit on the number of orders that may be issued. The District may issue orders requiring delivery to multiple destinations or performance at multiple locations.

Any order for repair or replacement issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and District's and State of Maryland rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided that the contractor shall not be required to make any deliveries under this contract after date of award.

In its bid, the Contractor's proposed fixed unit prices and firm fixed prices for each CLIN must be fully loaded, including all overhead elements and profit, if any.

29 INSURANCE

This Special Provision modifies 107.13 of the DC Standard Specifications Highways and Structures, 2009 and MDOT General Provision 7.14, Liability Insurance.

(A) GENERAL REQUIREMENTS

The Contractor shall procure and maintain in full force the types of insurance required below for all work in both the District of Columbia and the State of Maryland. The State of Maryland shall be listed as an additional named insured on each policy. The Contractor shall have its insurance broker or insurance company submit a Certificate of Insurance to the Contracting Officer giving evidence of the required coverage prior to commencing performance under this contract. In no event shall any work be performed until the required Certificates of Insurance signed by an authorized representative of the insurer(s) have been provided to, and accepted by, the Contracting Officer. All insurance shall be written with financially responsible companies authorized to do business in the District of Columbia or in the jurisdiction where the work is to be performed and have an A.M. Best Company rating of A-VIII or higher. The Contractor shall require all of its subcontractors to carry the same insurance required herein. The Contractor shall ensure that all policies provide that the Contracting Officer shall be given thirty (30) days prior written notice in the event the stated limit in the declarations page of the policy is reduced via endorsement or the policy is canceled prior to the expiration date shown on the certificate. The Contractor/Insurance Company shall provide the Contracting Officer with ten (10) days prior written notice in the event of non-payment of premium.

1. **Commercial General Liability Insurance.** $1,000,000 limits per occurrence, including coverage for Explosion, Collapse and Underground (XCU) and Incidental Pollution coverage, District of Columbia and State of Maryland added as additional insured.

2. **Automobile Liability Insurance.** $1,000,000 per occurrence combined single limit.

3. **Worker's Compensation Insurance.** According to the statutes of the District of Columbia and the State of Maryland, including Employer's Liability, $100,000 per accident for injury, $100,000 per employee for disease, $500,000 policy limit disease; if work is on or near navigable waterways, USL&H coverage (federal statutory limits) must be included.

4. **Umbrella/Excess Liability Insurance.** $5,000,000 limits per occurrence. Magnitude of contract may require higher limits. Contractor shall confirm required coverage with DCORM.

5. **Architect's and Engineer's Errors and Omissions Liability Insurance.** Limits of $1,000,000 per claim.

6. **Other Insurance Requirements**. In addition to the insurance requirements listed above, the Contractor shall provide additional insurance as required by Amtrak, utility companies, and permitting agencies as defined in other sections and appendices of these Special Provisions.

(B) **DURATION.** The Contractor shall carry all required insurance until all contract work is accepted by the District and the State of Maryland, and shall carry the required General Liability; and any required Professional Liability for five (5) years following final acceptance of the work performed under this contract.

(C) **LIABILITY.** These are the required minimum insurance requirements established by the District of Columbia. HOWEVER, THE REQUIRED MINIMUM INSURANCE REQUIREMENTS PROVIDED ABOVE, WILL NOT IN ANY WAY LIMIT THE CONTRACTOR'S LIABILITY UNDER THIS CONTRACT.

(D) **CONTRACTOR'S PROPERTY.** Contractor and subcontractors are solely responsible for any loss or damage to their personal property, including but not limited to tools and equipment, scaffolding and temporary structures, rented machinery, or owned and leased equipment. A waiver of subrogation shall apply in favor of the District of Columbia and the State of Maryland.

(E) **MEASURE OF PAYMENT**. The District nor Maryland shall not make any separate measure or payment for the cost of insurance and bonds. The Contractor shall include all of the costs of insurance and bonds in the contract price.

(F) **NOTIFICATION.** The Contractor shall immediately provide both Contracting Officers with written notice in the event that its insurance coverage has or will be substantially changed, canceled or not renewed, and provide an updated certificate of insurance to both Contracting Officers.

(G) **CERTIFICATES OF INSURANCE.** The Contractor shall submit certificates of insurance giving evidence of the required coverage as specified in this Insurance Section prior to commencing work. Evidence of insurance shall be submitted to:

Courtney Lattimore, Contracting Officer,
District of Columbia Department of Transportation,
55 M Street SE 7th Floor
Washington, DC 20003.

Michael Haifley, CPPO, CPPB
Deputy Director, Office of Procurement
Maryland Department of Transportation
7201 Corporate Center Drive
Hanover, Maryland 21076

SP 107 **METALIZING OF FERROUS METAL SURFACES**

This Special Provision supplements and modifies 811 of the DC Standard Specifications.

DESCRIPTION - All non-stainless ferrous metal bridge superstructure elements shall be shop metalized and touched up in the field as specified under (A) or Hot-Dip Galvanizing and Thermosetting based coating as specified under (B) herein.

(A) METALIZATION OF FERROUS METAL

(1) MATERIALS - Wire material for metalizing shall be zinc, or 85/15 zinc/aluminum alloy as certified by the manufacturer. The materials shall conform to the following quantitative requirements:

Zinc:

Element Content (%)

Iron (Fe) 0.0015% max. Cadmium (Cd) 0.0015% max. Lead (Pb) 0.003% max. Copper (Cu) 0.004% max. Zinc (Zn) Balance

85/15 zinc/aluminum:

Element Content (%)

Iron (Fe) 0.020% max. Copper (Cu) 0.004% max Cadmium (Cd) 0.004% max. Lead (Pb) 0.004% max. Titanium (Ti) 0.002% max. Aluminum (Al) 14.0%-16.0% Zinc (Zn) Remainder

The manufacturer shall furnish a Certificate of Analysis for each batch of material supplied. Each container or coil wrapping shall be properly labeled to identify component type, supplier, size, batch number and wire lot number.

The size of wire material shall be in accordance with the manufacturer's recommendations for the Flame or Arc Sprayed method. Powder material shall not be used.

All bolts, nuts, and washers shall be hot-dipped galvanized, in accordance with ASTM A153.

Sealers and topcoats, if specified on the plans, shall be selected from one of the following systems:

Manufacturer DFT, mils:

a. Carboline: Rustbond Penetrating Sealer 1.0-2.0 or Rustbond LT 1.0-2.0Carboline 133 HB topcoat 2.0-3.0

b. ICI Devoe Coatings: Pre-Prime 167 0.5-1.5 Devthane 378 topcoat 2.0-3.0

c. Xymax: Monolock PP 1.5-2.5 Bridge Finish topcoat 1.0-2.0

Material as applied shall not exceed 3.5 pounds per gallon VOC.

(2) **CONSTRUCTION REQUIREMENTS -** Surface preparation for, and application of, metalizing shall be performed in accordance with ANSI/AWS C2.18-93. Flame-cut edges shall be ground to remove the carburized surface prior to blasting. Blasting or metalizing shall not be performed when the surface temperature of the steel is less than 5 degrees F above the dew point as determined by a surface thermometer. Surfaces to be metalized shall be blast cleaned with a grit abrasive to provide a surface profile of 2.0-4.0 mils with an anchor tooth profile that is sharp, clean and free of embedded friable material with minimal peening effect. Steel shot and silica sand shall not be used. Surfaces shall be metalized within 8 hours after blasting. If flash rusting should occur prior to metalizing, the metal surface shall be reblasted. Surfaces shall be metalized to a thickness of at least 5 mils in accordance with the wire manufacturer's recommendation.

Before starting work, the Applicator shall apply the recommended thickness of the coating to a 2inch by 4-foot 8-inch by 0.05-inch steel coupon and bend it 180 degrees around a 0.5-inch mandrel to demonstrate the quality and adherence of the coating. Any disbonding or delamination of the coating which exposes the substrate shall require corrective action and additional testing before the metalizing process may continue.

Bolted surfaces shall be masked off and all other surfaces shall be sealed within eight (8) hours of metalizing. Sealer and topcoat shall be applied in accordance with the manufacturer's recommendations with regard to application temperature and humidity.

All fully-coated and cured assemblies shall be protected from handling and shipping damage with the prudent use of padded slings, dunnage, separators and tie downs. Loading procedures and sequences shall be designed to protect all coated surfaces. Any damaged areas shall be repaired in accordance with the manufacturer's recommendations. Where sealer and/or topcoating is specified, all bolts and areas that were not sealed or topcoated in the shop shall be prepared and sealed or topcoated after erection in accordance with the manufacturer's recommendations.

The Contractor shall provide the Engineer with documentation, which indicates that the applicator has performed successful metalizing work for the last three (3) years.

(B) HOT-DIP GALVANIZING AND HIGH PERFORMANCE THERMOSETTING BASED COATING

(1) HOT-DIP GALVANIZING

As an alternate to metalizing, the Contractor may provide coating for steel fabrications applied by the hot-dip process in accordance with 811.07 and as follows.

(1) Comply with ASTM A 123 for fabricated products and ASTM A 153 for hardware.

(2) Provide thickness of galvanizing specified in referenced standards.

(3) Galvanizing bath shall contain special high grade zinc and other earthly materials.

(4) Fill vent holes after galvanizing, if applicable, and grind smooth.

(2) HIGH PERFORMANCE THERMOSETTING BASED COATING

Provide coating matching approved samples for all metalized or galvanized surfaces. Factory-applied metal coatings shall be applied in a facility acceptable to the coating manufacturer. Galvanizer shall create a profile on the surface to provide adhesion for the coating. All coating material shall be force cured in a calibrated oven capable of maintaining curing temperatures per the coating manufacturer's specification. Coating must meet or exceed the criteria for the following categories as stipulated by the coatings manufacturer:

(1) **ADHESION** - ASTM D3359 Result: 1050 psi.

(2) **FLEXIBILITY** - ASTM D522 (Cylindrical Mandrel), passes.

(3) **HARDNESS** - ASTM D3363 (Pencil), 2H.

(4) **SALT SPRAY** - ASTM B117, passes 400 hrs.

(5) **HUMIDITY** - ASTM D4585, 100° F, 2000 hours, passes, no cracking or delamination.

(6) **IMPACT RESISTANCE** - ASTM D2794, direct 160 in lbs.

(7) **COLOR RETENTION** - ASTM D2244, 5 delta E after 1 year (based on inorganic resins).

(8) **CHALK RESISTANCE** - ASTM D4214, minimal.

(9) **GLOSS RETENTION** - ASTM D 523, minimal.

(10) **XENON ARC TEST** - ASTM D 4798, passes 200 hours.

(11) WARRANTY - Provide 20 year warranty against 10 percent or more visible rust. Warranties for fading or discoloration of the finish shall be that which is supplied by the coating manufacturer.

For all structural steel provide a finish coat color of Rusty Brown per Federal Standard 595C.

(C) MEASURE AND PAYMENT - No separate measure and payment will be made for the work under this S.P. (metallization of surfaces, hot-dip galvanizing, and thermosetting based coating); therefore, the cost for all labor, materials, transportation, blasting, cleaning, metalizing, galvanizing, sealing, topcoating, and high performance thermosetting based coating to the proper completion of the work shall be included in the lump sum price bid for structural steel.

110 PEPCO APPROVED METER AND SAFETY SWITCH: ITEM 618 985

This S.P. revises and supplements 618 and 621 of the DC Standard Specifications.

(A) DESCRIPTION

The Contractor shall furnish all labor, equipment and materials necessary to furnish and install a fused line side safety switch and PEPCO approved Meter can assembly, both mounted to the side of the streetlight control cabinet.

(B) MATERIALS

Provide either ringed or ringless type heavy duty meter sockets as required by the PEPCO for non-residential application. PEPCO approved heavy duty meter socket shall be rated for 200 AMP, with high-pressed lugs, five (5) terminals and by-pass level. Provide stainless steel hardware, suitable for outdoor use, for mounting of meter socket to a cabinet.

Safety Switches shall be NEMA standards KS1-1990. The safety switch enclosure shall be Type 4 stainless steel, with external operating handle, enclosure cover interlock, and external switch mechanism handle with provisions for securing in both the ON and OFF positions by padlock. The switch mechanism shall be of heavy duty design with quick make, quick break type operations and visible blades. Provide stainless steel hardware, suitable for outdoor use, for mounting of meter socket to a cabinet.

The Safety Switch shall be fusible with integral fuse puller. Fuses shall be time-delay type, rated at 200 AMP. Single phase disconnect switches shall have 2 poles with solid neutral and shall be rated at 240 Volts. Three phase disconnect switches shall have 3 poles with solid neutral and shall be rated at 600 Volts.

(C) CONSTRUCTION METHOD

Utility Connection – Before any control equipment or material is ordered, arrange a meeting with PEPCO representatives, DDOT Lighting representatives and the Engineer to establish a schedule for utility connections. Do not disconnect, de-energize, reconnect, tamper with, or otherwise handle any of PEPCO's facilities. Make the utility service connection to the point of service supplied by the utility company. Make the necessary arrangements with PEPCO to ensure needed utilities availability at the time of turn on. Delays due to utility energization, connection, or disconnection will not be a basis for time extension. Report any difficulties in securing utility company services to the Engineer as soon as possible.

Safety Switch shall be wired to be on the line side, and provide a means of disconnecting the service cables prior to the meter.

(D) MEASURE AND PAYMENT

The unit of measure for Furnish and Install Line Side Fused Safety Switch and Pepco approved meter will be per each. Payment will be made at the contract unit price per meter socket and safety switches installed, and payment will include all labor, mounting hardware, mounting to cabinet, fuses, PEPCO coordination, wiring, grounding, equipment, tools, materials and all incidentals necessary to complete the work specified herein.

111 REPAIR ELECTRICAL MANHOLE: ITEM 618 052

(A) DESCRIPTION

The Contractor shall furnish all labor, tools, material and equipment necessary to repair existing electrical manholes used for the new lighting system.

(B) MATERIALS AND CONSTRUCTION

Materials to repair existing manholes shall consist of:

1. P.C.C. Mix Design - Shall conform to 817.03 for Class B, structural, minimum 28-day compressive strength of 4,500 psi on field test cylinders made in the field and cured in the laboratory.
2. Curing Material - Shall conform to 814.03 for Membrane Cure.
3. Frame and Covers - Shall be gray iron casting conforming to the requirements of 815.04 of the Standard Specifications. The word **"DCSL"** in 1-inch raised letters shall be cast in the center depression of the top of cover and shall be flush with the surface of cover.
4. Pre-cast Reinforced Concrete - Shall meet the requirements of 822.04 of the Standard Specifications.

Repair of existing manholes consists of:

1. Repairing/patching the manhole walls.
2. Replacing damaged or missing frames and lids.
3. Removing water from existing manholes, using a submersible utility pump.
4. Raising the elevation of the frame and lid to match the existing grade of the surrounding area.

(C) MEASURE AND PAYMENT

The unit of measure for installing repairing existing electrical manholes will be per each. Payment for repairing existing electrical manholes will be made at the contract unit price per each, which payment will include all labor, excavating, backfilling, compacting and disposing of excess materials, patching, water removal, frames, lids, equipment, tools, material and incidentals necessary to complete the work specified herein.